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Claims

1. An arrangement for session control in a wireless communication network, comprising:

5 means for detecting application-specific packets in a packet stream; and
means for activating, in response to the means for detecting, a plurality of packet sessions with application-specific QoS parameters, without
10 requiring explicit cooperation of application software.

2. The arrangement of claim 1 further comprising means for deactivating at least one of the plurality of packet sessions.

15 3. The arrangement of claim 1 or 2 wherein the wireless communication network comprises a UMTS radio access network.

20 4. The arrangement of claim 1, 2 or 3 wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

25 5. The arrangement of any one of claims 1-4 wherein the means for detecting comprises stateful inspection means, and the arrangement further comprises session manager means and packet filter means responsive to the stateful inspection means.

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6. The arrangement of any one of claims 1-5, wherein the means for detecting is arranged to inspect uplink packet flows to detect application-specific packet flows, via application-specific control messages.

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7. The arrangement of any one of claims 1-6, wherein the means for detecting is arranged to inspect downlink packet flows to detect application-specific packet flows, via application-specific control messages.

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8. The arrangement of any one of claims 1-7, wherein the packet sessions comprise conversational class PDP contexts.

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9. The arrangement of claim 8, wherein the conversational class PDP contexts are arranged to carry Voice over IP (VoIP) traffic.

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10. The arrangement of claim 8, wherein the conversational class PDP contexts are arranged to carry Video over IP traffic.

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11. The arrangement of claim 9 or 10 wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP).

12. The arrangement of claim 9 or 10 wherein the traffic is based on originated calls controlled by H.323 protocol.

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13. The arrangement of any one of claims 1-7, wherein
the packet sessions comprise streaming class PDP
contexts.

5 14. The arrangement of claim 13, wherein the streaming
class PDP contexts are arranged to carry streaming media
traffic controlled by Real Time Streaming Protocol.

10 15. The arrangement of any one of claims 1-7, wherein
the packet sessions comprise interactive class PDP
contexts.

15 16. The arrangement of any one of claims 1-7, wherein
the packet sessions comprise background class PDP
contexts.

17. The arrangement of claim 16, wherein the background
class PDP contexts are arranged to carry Post Office
Protocol - Version 3 (POP3) traffic.

20 18. The arrangement of claim 16, wherein the background
class PDP contexts are arranged to carry Simple Mail
Transfer Protocol (SMTP) traffic.

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19. A method for session control in a wireless communication network, comprising:

detecting application-specific packets in a packet stream; and

5 activating, in response to the step of detecting, a plurality of packet sessions with application-specific QoS parameters, without requiring explicit cooperation of application software.

10 20. The method of claim 19 further comprising deactivating at least one of the plurality of packet sessions.

15 21. The method of claim 19 or 20 wherein the wireless communication network comprises a UMTS radio access network.

22. The method of claim 19, 20 or 21 wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

20 23. The method of any one of claims 19-22 wherein the step of detecting comprises detecting in a stateful inspector, and the method further comprises providing a session manager and a packet filter responsive to the 25 stateful inspection means.

24. The method of any one of claims 19-23, wherein the step of detecting comprises inspecting uplink packet flows to detect application-specific packet flows, via 30 application-specific control messages.

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25. The method of any one of claims 19-23, wherein the step of detecting comprises inspecting downlink packet flows to detect application-specific packet flows, via application-specific control messages.

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26. The method of any one of claims 19-25, wherein the packet sessions comprise conversational class PDP contexts.

10 27. The method of claim 26, wherein the conversational class PDP contexts carry Voice over IP (VoIP) traffic.

28. The method of claim 26, wherein the conversational class PDP contexts carry Video over IP traffic.

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29. The method of claim 27 or 28 wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP).

20 30. The method of claim 27 or 28 wherein the traffic is based on originated calls controlled by H.323 protocol.

31. The method of any one of claims 19-25, wherein the packet sessions comprise streaming class PDP contexts.

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32. The method of claim 31, wherein the streaming class PDP contexts carry streaming media traffic controlled by Real Time Streaming Protocol.

30 33. The method of any one of claims 19-25, wherein the packet sessions comprise interactive class PDP contexts.

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34. The method of any one of claims 19-25, wherein the packet sessions comprise background class PDP contexts.

5 35. The method of claim 34, wherein the background class PDP contexts carry Post Office Protocol - Version 3 (POP3) traffic.

10 36. The method of claim 34, wherein the background class PDP contexts carry Simple Mail Transfer Protocol (SMTP) traffic.

37. The method of any one of claims 19-36, wherein the method is performed in User equipment (UE).

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38. User equipment (UE) for use in a UTRA system, the user equipment comprising the arrangement of any one of claims 1-18.

20 39. An integrated circuit comprising the arrangement of any one of claims 1-18.

40. A computer program element comprising computer program means for the method of any one of claims 19-37.

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